

## PENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CAMPBELL2PCT</b>	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/US 97/ 02315</b>	International filing date ( <i>day/month/year</i> ) <b>20/02/1997</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>20/02/1996</b>
Applicant <b>APPLIED RESEARCH SYSTEMS ARS HOLDING N.V. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

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1.  Certain claims were found unsearchable (see Box I).

2.  Unity of invention is lacking (see Box II).

3.  The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

filed with the international application.

furnished by the applicant separately from the international application,

but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

Transcribed by this Authority

4. With regard to the title,  the text is approved as submitted by the applicant

the text has been established by this Authority to read as follows:

**Hybrid proteins which form heterodimers**

5. With regard to the abstract,

the text is approved as submitted by the applicant

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

Figure No. \_\_\_\_\_  as suggested by the applicant

None of the figures.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 97/02315

**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: 20  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Remark: Although claim 20 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.**
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 97/02315

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6	C12N15/62	C12N15/16	C07K14/59	C07K14/715	C07K14/72
	C07K16/46	C12N15/85	C12N5/10	A61K38/24	

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 95 31544 A (YEDA RESEARCH AND DEVELOPMENT CO. LTD.) 23 November 1995            cited in the application            see page 6, line 28 - line 39            see page 7, line 4 - page 11, line 12            ---</p>	1-20
A	<p>MOL. ENDOCRINOL. (1995), 9(12), 1720-6            CODEN: MOENEN; ISSN: 0888-8809,            1995, XP000675344            NARAYAN, PREMA ET AL: "Functional expression of yoked human chorionic gonadotropin in baculovirus-infected insect cells"            see abstract            see page 1721, right-hand column,            paragraph 2 - page 1724, left-hand column,            paragraph 1            ---            -/-</p>	1-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

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Date of the actual completion of the international search

10 June 1997

Date of mailing of the international search report

01.07.97

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/02315

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BIOLOGY OF REPRODUCTION,      vol. 52, no. 1, January 1995,      pages 68-73, XP000675391      GREGORY A. JOHNSON ET AL.:      "Baculovirus-Insect cell production of      bioactive      Choriogonadotropin-Immunoglobulin G      heavy-chain fusion proteins in sheep"      cited in the application      see the whole document      ---</p>	1-20
P,X	<p>J. BIOL. CHEM. (1996), 271(49),      31638-31642 CODEN: JBCHA3; ISSN: 0021-9258,      1996, XP002032680      WU, CHENGBIN ET AL: "Protein engineering      of a novel constitutively active hormone-      receptor complex"      see abstract      see page 31638, right-hand column,      paragraph 2 - paragraph 3      see page 31639, left-hand column,      paragraph 4 - right-hand column, paragraph      2      see page 31640, right-hand column,      paragraph 4 - page 31641, right-hand      column, paragraph 4      -----</p>	1-5,7,9, 10,13-18

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/02315

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9531544 A	23-11-95	AU 2546995 A CA 2189983 A EP 0759984 A FI 964509 A NO 964741 A ZA 9503842 A	05-12-95 23-11-95 05-03-97 09-01-97 09-01-97 17-01-96